

Work Order ID 148222

Monday, June 27, 2016 3:09:17 PM

847.7601

D148222

148222

Page 1

Item ID: 647.7601

REV. N/C

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Lower Deflector Assembly

Start Date: 6/28/2016 Start Qty: 4.00

4

Cust Item ID:

Required Date: 7/4/2016 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan: dm

Date: 16/06/21

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
647.7600	NC

110	Pick Kit	0.00
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110

Packaging

Memo

0.00

JUL 06 2016

DAS
6
9-89

Packaging

120

0.00

120

Small Fab

Memo

0.09

Small Fab

Assemble as per dwg and apply loctite 598 on all faying surfaces per note 5.

A/R RTV LOCTITE 598: M135047
exp. date: 01/18

4x

16/07/11

DAS
36
9-89

130

QC5- Inspect part completeness to step on W/O 0.00

130

QC

Memo

0.01

Quality Control

(4)

JUL 14 2016
DAS
38
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Work Order ID 148222

Monday, June 27, 2016 3:09:17 PM

148222

Page 2

Item ID: 647.7601 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Lower Deflector Assembly
Start Date: 6/28/2016 Start Qty: 4.00 ***4*** Cust Item ID:
Required Date: 7/4/2016 Req'd Qty: 4.00 ***4*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	Identify as per dwg & Stock Location: CCF065	0.00				4	DAS 6		
140							9-89		
Packaging	Memo	0.01							
Packaging	***IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV***								JUL 15 2016
150	QC21- Final Inspection - Work Order Release	0.00					DAS 21		JUL 18 2016
150							9-89		
QC	Memo	0.07							
Quality Control									

DAS
21
9-89 **JUL 15 2016**

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

Monday, June 27, 2016 3:09:17 PM

Page 1

Work Order ID: 148222

148222

Parent Item: 647.7601

647 7601

Parent Item Name: Lower Deflector Assembly

Start Date: 6/28/2016

Required Date: 7/4/2016

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP REV:A NEW ISSUE 15-08-04 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
647.7611 *647 7611* Lower Deflector		Manufactured	No				Each	4.0000		4			DAS 6 9-09
				<u>Location</u>				<u>Loc Qty</u>					
				cck059A				4					
				141032				4					
647.7612 *647 7612* Breakaway Tip		Manufactured	No				Each	9.0000		4			DAS 6 9-09
				<u>Location</u>				<u>Loc Qty</u>					
				CCK113				9					
				138616				9					
MS20470AD6-14 *MS20470AD6-14* Rivet		Purchased	No				Each	307.0000		8			DAS 6 9-09
				<u>Location</u>				<u>Loc Qty</u>					
				ST308				307					
				m133284				307					

JUL 06 2016

M127304

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

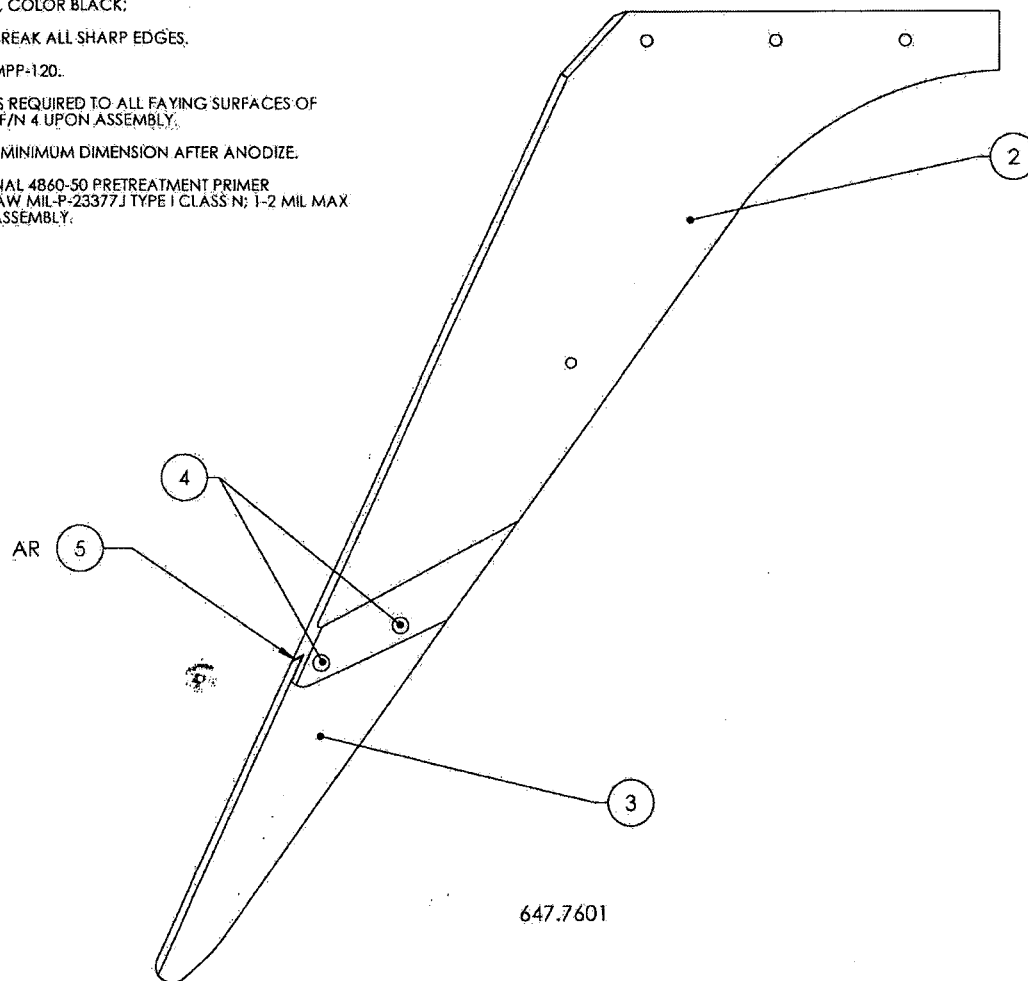
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;"></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
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Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			OTHER : ☐																	

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NOTES:

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK;
3. DEBURR AND BREAK ALL SHARP EDGES.
4. IDENTIFY IAW MPP-120.
- 5 APPLY F/N 5 AS REQUIRED TO ALL FAYING SURFACES OF F/N 2, F/N 3 & F/N 4 UPON ASSEMBLY.
- 6 MAXIMUM OR MINIMUM DIMENSION AFTER ANODIZE.
- 7 FINISH: CARDINAL 4860-50 PRETREATMENT PRIMER PRIME IAW MIL-P-23377J TYPE I CLASS N; 1-2 MIL MAX AFTER ASSEMBLY.



REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	LAST PROTOTYPE REVISION: P13		N/C
N/C	INITIAL RELEASE	12/22/99	P. BRAYVO

A/R	QTY	601.2045	RTV, LOCTITE 598		
2	4	601.3122	RIVET	MS20470AD6-14	
1	3	647.7612	BREAKAWAY TIP	△	△
1	2	647.7611	LOWER DEFLECTOR	△	△
	1	647.7610	UPPER DEFLECTOR	△	△
		647.7601	LOWER DEFLECTOR ASSY		△
7601	FIND #	PART #	DESCRIPTION	MAT'L	SPEC.
PARTS LIST					
NEXT ASSY (S)			APICAL INDUSTRIES		
647.7400			2408 TEMPLE HEIGHTS DR.		
647.7500			OCEANSIDE, CA. 92056-3512 (760)724-5300		
			DEFLECTORS		
			SIZE [CAGE CODE] DWG. NO.	647.7600	REV. N/C
			B 07M16		
			SCALE NONE	SHEET 1 OF 4	

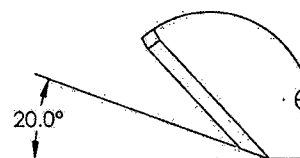
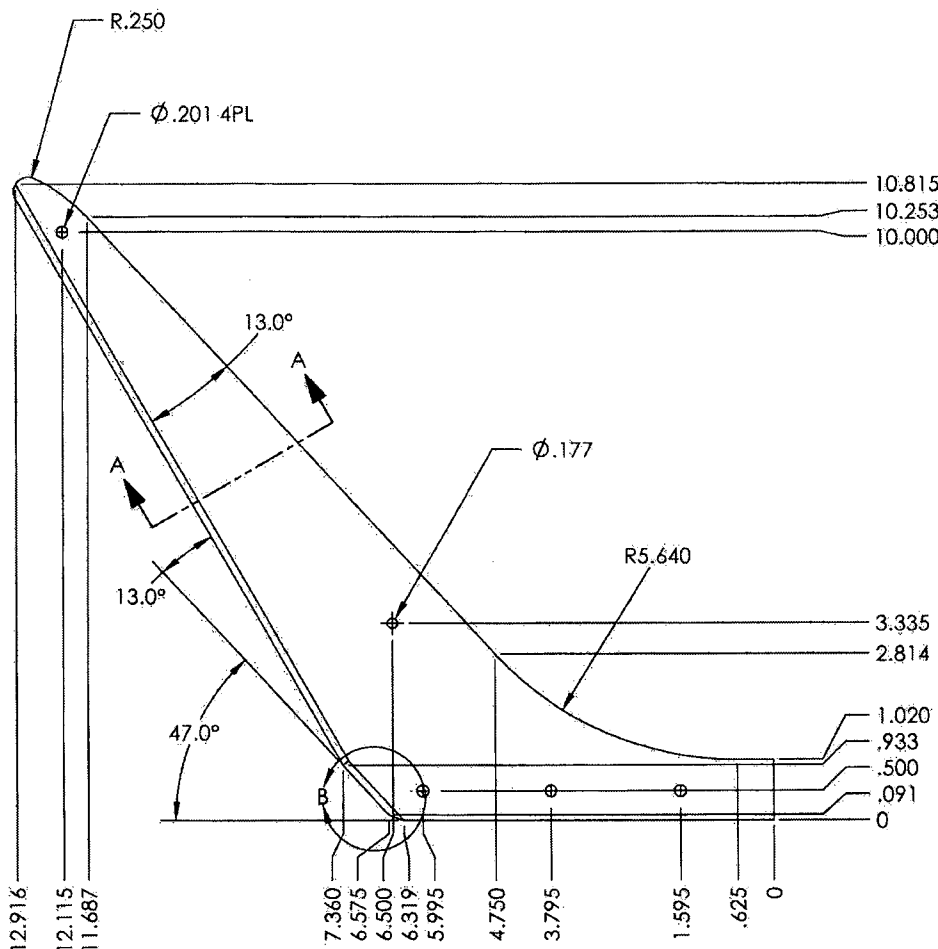
w/o 148222

2m 16/06/27

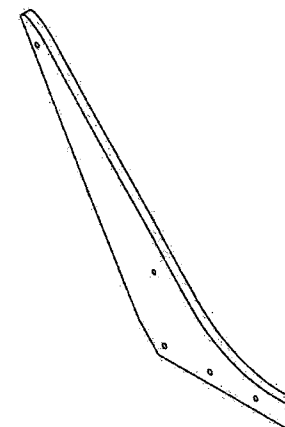
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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

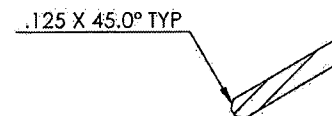
A
B
C
D



DETAIL B
SCALE 1 : 1



647.7610



SECTION A-A
SCALE 1 : 2

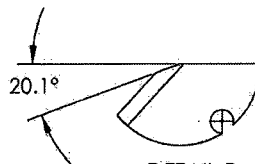
ORIGINAL DATE: 11/23/09 DRAWN BY: A. GUAN CHECKED BY: P. SANDOZ DRAWING APPROVAL: P. SANDOZ CONTRACT NO.:	APICAL INDUSTRIES 2408 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1 PLACE DECIMALS .003 2 PLACE DECIMALS .001 3 PLACE DECIMALS .0005 ANGLES ± .5°	DEFLECTORS
SEE: B CAGE CODE: 07M26 SCALE: NONE	DWG. NO.: 647.7600 REV.: N/C SHEET: 2 OF 4

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

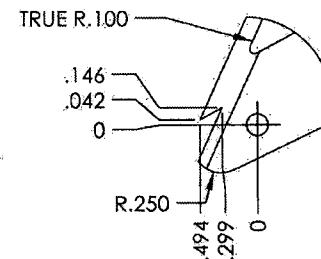
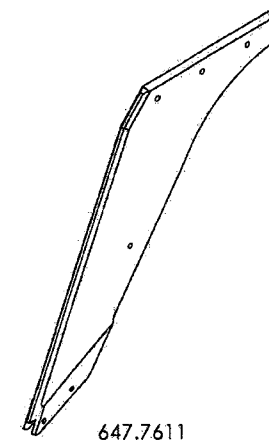
.078 X 45.0° TYP

SECTION C-C
SCALE 1 : 2



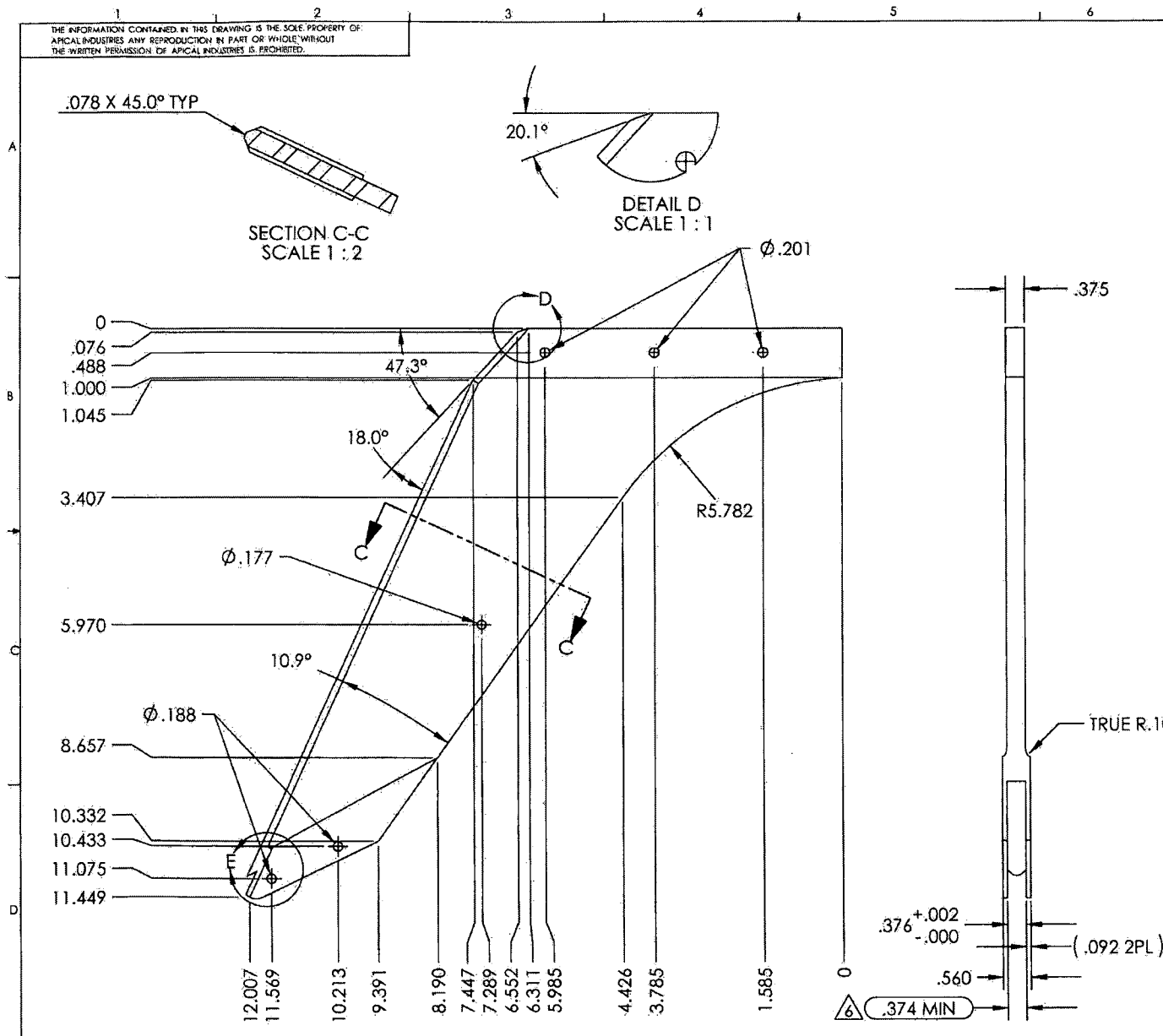
DETAIL D
SCALE 1 : 1

Ø .201



DETAIL E
SCALE 1 : 1

ORIGINAL DATE (MO-DA-YR) 11-23-09		APICAL INDUSTRIES	
DRAWN BY: J. CRICER		2608 TEMPLE HEIGHTS DR.	
A. COHEN P. BRAYO		OCEANSIDE, CA. 92056-3512 (760) 724-5300	
DRAWING APPROVAL P. MALLO 12-22-09		DEFLECTORS	
(CONTRACT) NO.		SET: B	SCALE: NONE
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.03 3 PLACE DECIMALS ±.010 ANGLES ±.5°		DWG. NO. 647.7600	REV. N/C.
		SHEET 3 OF 4	



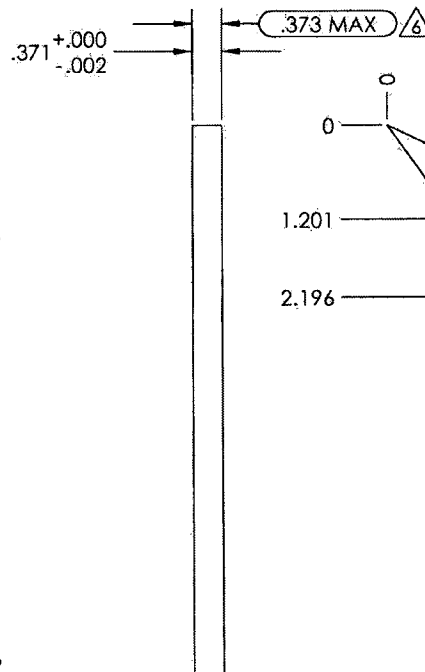
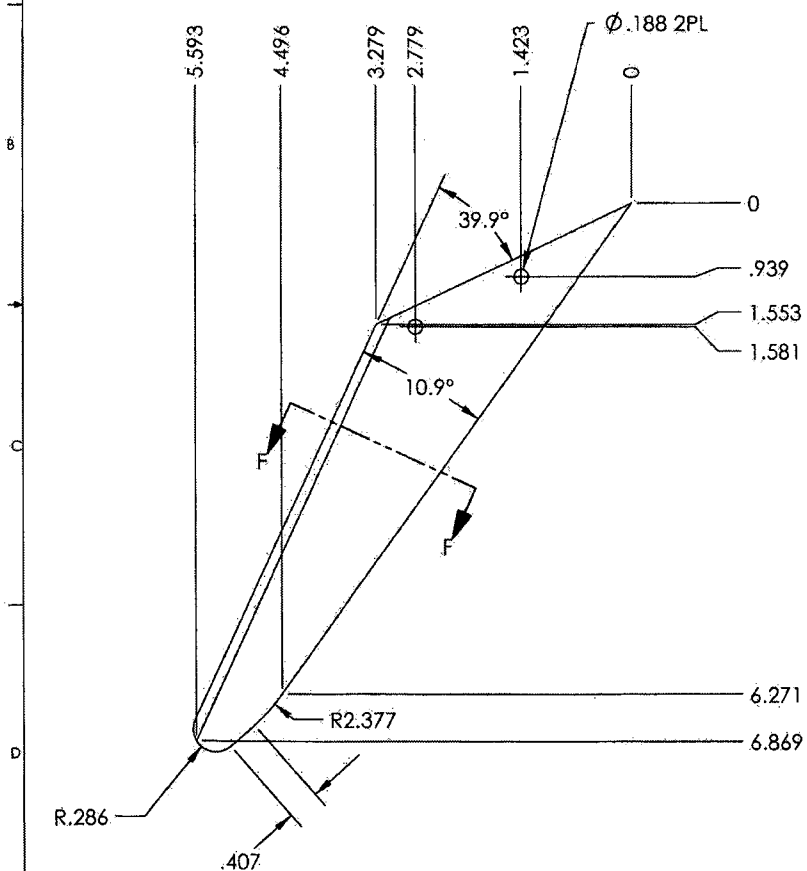
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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

.088 X 45.0°

SECTION F-F
SCALE 1 : 1.5

647.7612



ORIGINAL DATE 11-28-09 APPROVED BY A. GUAN DRAWING APPROVAL P. BRAVO CONTRACT NO.		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS .003 3 PLACE DECIMALS .000 ANGLES ± .5°		SEE CAGE CODE DWG. NO. B 07M26 647.7600	REV. N/C
SCALE NONE		SHEET 4 OF 4	